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| 09/830,694      | 05/14/2001  | Heinz-Peter Rink     | IN-5484             | 1819             |

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EXAMINER

ZALUKAEVA, TATYANA

| ART UNIT | PAPER NUMBER |
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1713

DATE MAILED: 06/20/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/830,694

Applicant(s)

RINK ET AL.

Examiner

Tatyana Zalukaeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 12, 13, 15-21 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6, 16, 17, 20 and 25-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 12, 13, 15, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-6, 12, 13, 15-21 and 25-30 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Election/Restrictions***

1. Claims 5, 6, 16, 17, 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 11. Applicant's election has been treated as made without traverse of polyols exemplified in Example 3 in Paper No. 11 is acknowledged. Applicants' Example 3 does not name a specific alcohol, therefore, in order not to impose an election requirement again and not to delay the prosecution, the election was made based on constructive election of polyols and constructive election of specific polyols in the instant claims

2. Claims 25-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

3. Claims 1-4, 12, 13, 15, 18, 19 are examined on the merits.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the presence of all polyols listed in claim 4 as (i), (ii), and (iii) each one class individually, does not reasonably provide enablement for the mixture of (i), (ii) and (iii), which is predetermined by the transitional phrase comprising. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make an/or use the invention commensurate in scope with these claims. Apparently these (i), (ii) and (iii) should have been listed as a Markush recitation to provide them in an alternative manner. Therefore, the claim was examined to the best of Examiner's ability in light of this rejection.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwarte et al (U.S. 5,514,746)

Schwarte discloses mixtures of substances prepared by polymerization of unsaturated monomers, such as butyl acrylate, methyl Methacrylate and styrene in solvents. Of particular interest are lines 23-26 of col. 3, columns 6-8, Examples "Topcoat

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Composition 1 (T1), wherein butyl glycol is used as solvent, and "Topcoat composition 2 (T2)", wherein also butanediol is selected, i.e. a compound used in crosslinking reactions. See also claims 1 in col. 8, 9.

8. Claims 1-4, 15 rejected under 35 U.S.C. 102(b) as being anticipated by Dmmann (U.S. 4,826,617).

Dammann discloses curable binder compositions based on unsaturated monomers, which are obtained by polymerizing butyl acrylate in diluents having functional groups, in particular aliphatic hydroxyl groups, e.g. polyether triols as reactive diluents (see col. 3, lines 43-45, col. 4, lines 30-60, col. 5, lines 10-21, especially, col. 14-16, Examples 17, 19-26, Table 7. The thus obtained resin solutions can be crosslinked with polyisocyanates, (col. 16, Example 27)

9. Claims 1-4, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Eschwey et al (U.S. 4,343,728)..

Eschwey discloses preparation of and solution polymerizates of acrylic or methacrylic acid esters of alcohols wherein acrylic or methacrylic monomers are polymerized in a solvent of high-boiling alcohols of from 8 to 40 carbon atoms and 1 to 6 hydroxyl groups, the total batch to be polymerized containing from about 15 to 85 percent by weight of polymerizable substance, based on the weight of the total batch. This solution polymerizates are used to improve the flow properties of lacquers (abstract).

Alcohols such as, for example, n-octanol or the other isomeric octanols, are suitable as solvents for the polymerization. similarly, ethylhexanol and the isomeric dimethyloctanols are also suitable solvents. All suitable alcohols must have a boiling

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point above 160.degree. C., preferably above 200.degree. C. A group of alcohols that can advantageously be used comprises the so-called fatty alcohols with from approximately 12 to 18 carbon atoms. Also suitable are saturated, mono-alcohols with from 12 to 36 carbon atoms and known as Guebert alcohols. The Guebert alcohols are prepared by Guebert condensation of alcohols having one-half of the final chain length, that is, alcohols having from 6 to 18 carbon atoms.

Suitable diols are obtainable by hydrolysis from aliphatic epoxy compounds, for example. The epoxy groups may be internal as well as terminal in these cases. Useful diols include, for example, dodecyldecane diol or octadecyldecane diol. With the proper length of the carbon chain, more than from 1 to 6 OH-groups per molecule may also be suitable. Such substances that contain more than 2 hydroxyl groups can be obtained by hydrolysis from aliphatic epoxides, starting with from 2 to 3 epoxy groups in the molecule. Furthermore, there is another group of suitable aliphatic hydroxyl compounds that are obtained by the addition of carbon monoxide and subsequent hydrogenation from unsaturated and possibly polyunsaturated fatty alcohols. There are primary alkanols such as bis-(hydroxymethyl)-octadecanol or hydroxymethyloctadecanol. Also suitable are the synthetic alcohols that can be prepared by hydrogenation from branched fatty acids with from approximately 9 to 18 carbon atoms or their esters. An especially advantageous polymerization may be achieved by the combination of alcohols of the above-mentioned type (col. 2, lines 26-62, col. 3, 4, Table 1, Examples 1-8)

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10. Claims 12 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Eschwey et al.

The above rejections were made under 35 USC 102 (b) in the sense of *In re Spada*, 911 F 2d 705, 709 15 USPQ 1655, 1658 (Fed. Cir. 1990), which settles that when the claimed compositions are not novel, they are not rendered patentable by recitation of properties, whether or not these properties are shown or suggested in prior art. Or in the alternative under 35 USC 103 (a) as per *In re Fitzgerald* (205 USPQ 594). (CAFC) wherein it is the base presumption that the properties governing the claimed polymers and compositions, if not taught, may be very well met by the copolymers and compositions of Eschwey, since the copolymers of Eschwey are essentially the same and made in essentially the same manner as applicants' polymer). The burden to show that this, in fact, is not the case is shifted to applicants.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eschwey et al.

Eschwey does not specifically disclose diethyloctane diols as the media for polymerization. However, Eschwey generically discloses diols that are obtainable by hydrolysis from aliphatic epoxy compounds, for example. The epoxy groups may be internal as well as terminal in these cases. Useful diols include, for example, dodecyldecane diol or octadecyldecane diol. With the proper length of the carbon chain, more than from 1 to 6 OH-groups per molecule may also be suitable. Thus Eschwey motivates those skilled in the art to utilize different high boiling alcohols with suitable degree of branching, and a person skilled in the art would have found it obvious to use



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diethyl octane diols a s species of branched 8 and higher diols with the reasonable expectation of success.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703) 308-8819. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



Tatyana Zalukaeva  
Primary Examiner  
Art Unit 1713

June 5, 2003